

CLAIMS:

1. A heat recovery ventilator comprising:

a heat exchanger having discrete inlet and exhaust passageways extending therethrough for providing heat transfer between respective fluids flowing along said inlet and said exhaust passageways;

said inlet passageway providing fluid communication between a supply inlet plenum and a supply discharge plenum having a supply discharge port for discharging supply air;

said exhaust passageway providing fluid communication between an exhaust inlet plenum having an exhaust inlet port and an exhaust discharge plenum;

said supply inlet plenum having a supply port for admitting supply air into said supply inlet plenum;

said exhaust discharge plenum having an exhaust port for discharging exhaust air from said exhaust discharge plenum;

a transfer port between said supply inlet plenum and said exhaust discharge plenum for providing fluid communication therebetween; and,

a flow diverter associated with said transfer port movable between a venting configuration closing said transfer port and allowing fluid flow through said exhaust discharge port and a defrost configuration closing said exhaust discharge port and opening said transfer port.

2. A heat recovery ventilator as claimed in Claim 1 wherein at least one of said inlet exhaust passageways includes a plurality of individual adjacent passageways.

3. A heat recovery ventilator as claimed in claim 2 wherein said supply inlet plenum, supply discharge plenum, exhaust inlet plenum and exhaust discharge plenum are at least partially defined by a housing containing said heat exchanger.

4. A heat recovery ventilator as claimed in claim 3 wherein fluid flow along said exhaust passageway is augmented by an exhaust fan mounted within one of said exhaust inlet plenum and said exhaust discharge plenum.
5. A heat recovery ventilator as claimed in claim 4 wherein fluid flow along said inlet passageway is augmented by a supply discharge fan mounted within said supply discharge plenum.
6. A heat recovery ventilator as claimed in claim 5 wherein said exhaust and said supply discharge fans are of similar capacity.
7. A heat recovery ventilator as claimed in claim 6 wherein said exhaust and supply discharge fans share a common fan motor.
8. A heat recovery ventilator as claimed in claim 7 further having an actuator operably connected to said flow diverter for moving said flow diverter between said venting and said defrost configurations.
9. A heat recovery ventilator as claimed in claim 8 wherein said actuator communicates with a controller which causes said actuator to move.
10. A heat recovery ventilator as claimed in claim 9 wherein fluid flow along said exhaust passageway is augmented by an exhaust fan mounted within said exhaust discharge plenum.
11. A heat recovery ventilator as claimed in claim 10 wherein said supply discharge fan is mounted in a supply discharge duct portion of said supply discharge plenum which extends to said supply discharge port and said exhaust fan is mounted in an exhaust discharge duct portion of said exhaust discharge plenum which extends to said exhaust port.
12. A heat recovery ventilator as claimed in claim 11 wherein said supply discharge, exhaust inlet and exhaust ports are all on a common side of said heat recovery ventilator.

13. A heat recovery ventilator as claimed in claim 7 wherein said fan motor is mounted within said exhaust inlet plenum.
14. A heat recovery ventilator as claimed in claim 9 wherein said fan motor is mounted in said exhaust inlet plenum.